

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 03057305 A

(43) Date of publication of application: 12.03.91

(51) Int. Cl. H01Q 3/30

(21) Application number: 01193284

(22) Date of filing: 26.07.89

(71) Applicant: A T R HIKARI DENPA TSUSHIN  
KENKYUSHO:KK

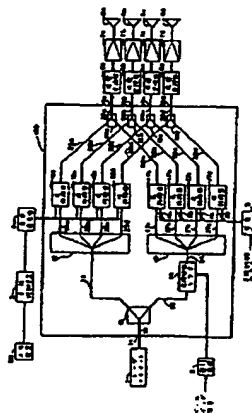
(72) Inventor: KAMIYA YOSHIAKI  
IWASAKI HISAO  
YASUKAWA KOUJI

(54) OPTICAL CONTROL PHASED ARRAY ANTENNA COPYRIGHT: (C)1991,JPO&Japio

(57) Abstract

**PURPOSE:** To control the beam direction of a transmission radio signal radiating from an antenna by allowing each phase shift means to vary each phase quantity in response to an electric signal inputted from a signal generating means.

**CONSTITUTION:** When the operator inputs information in the beam direction of a phased array antenna to an input device 80, the information is outputted to a direction controller 3. The controller 3 in response thereto outputs a prescribed DC voltage to optical phase shifters 16a-16d from a variable voltage source 4 so that the beam direction of a microwave signal radiating from antennas 8a-8d based on the information of the beam direction is coincident with the inputted beam direction. Simultaneously the phase is shifted and the microwave signal radiates from the antennas 8a-8d in the required beam direction inputted by the operator. Thus, the optical control antenna able to control the beam scanning is obtained.



BEST AVAILABLE COPY